

Atty Docket No.: 74120-301403
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REMARKS

The Applicant respectfully requests reconsideration of this application as amended. Claims 1-12 and 14 have been cancelled without prejudice. In accordance with 37 C.F.R. § 1.116(b)(1), claim 14 is cancelled without prejudice by this Response. No other amendments are made in the current Response. Therefore, claims 13 and 15-27 are present for examination.

CLAIM REJECTIONS - 35 U.S.C. § 101

In the Final Office Action, the Examiner rejected claims 13 and 15-27 under 35 U.S.C. § 101 as being allegedly directed to non-statutory subject matter. The Examiner stated two alleged requirements for statutory subject matter: "the practical application of an algorithm or idea result in a useful, concrete, tangible result, AND . . . claim provides a limitation in the technological art that enables a useful, concrete, tangible result." *Final Office Action of June 3, 2005*, p 2.

As to the question, "What is statutory subject matter?" the Applicant respectfully points the Examiner to the statute itself: "Whoever invents or discovers *any* new and useful process . . . may obtain a patent therefor, subject to the conditions and requirements of this title." 35 U.S.C. § 101 (emphasis added). The U.S. Supreme Court, whose precedent binds not only the U.S. Court of Appeals for the Federal Circuit ("Federal Circuit" - successor to the Court of Customs & Patent Appeals - C.C.P.A.), but also lower courts and the U.S. Patent & Trademark Office, has interpreted this statute and set forth the exclusions from patentability: "Excluded from such patent protection are *laws of nature, natural phenomena, and abstract ideas.*" *Diamond v. Diehr*, 450 U.S. 175, 185 (1981) (emphasis added). If additional categories were interpreted by the Supreme Court to be excluded from the scope of 35 U.S.C. § 101, Applicant submits that the Supreme Court would have listed them along with "laws of nature, natural phenomena, and abstract ideas." The Supreme Court has also recognized that Congress, in legislating 35 U.S.C. § 101, "intended statutory subject matter to 'include anything under the sun that is made by man.'" *Diamond*, 450 U.S. at 181 (quoting S. Rep. No. 1979, 82d Cong. 2d Sess., 5 (1952); H. R. Rep.

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No. 1923, 82d Cong., 2d Sess., 6 (1952), U.S. Code Cong. & Admin. News 1952, pp. 2394, 2399).

The Examiner has cited "MPEP Section iV 2(b)" to support the two alleged conditions for statutory subject matter. *Final Office Action of June 3, 2005*, p 2. Although it is not clear which MPEP Section the Examiner refers to, it appears that the Examiner may be referring to MPEP § 2106(IV)(B)(2)(b)(ii), which indicates that a "claim is limited to a practical application [in the technological arts] when the method, as claimed, produces a concrete, tangible and useful result" (citing *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352, 1358 (Fed. Cir. 1999)). In the *AT&T Corp.* case, from which this phrase in the MPEP is derived, the Federal Circuit reiterated its finding from *Arrhythmia Research Technology, Inc. v. Corazonix Corp.*, 958 F.2d 1053 (Fed. Cir. 1992): "that the claimed process 'transformed' data from one 'form' to another simply confirmed that Arrhythmia's method claims satisfied § 101 because the mathematical algorithm included within the process was applied to ***produce a number which had specific meaning – a useful, concrete, tangible result – not a mathematical abstraction.***" *AT&T Corp.*, 172 F.3d at 1359 (emphasis added). Such recent cases present a fuller picture of the courts' interpretation of 35 U.S.C. § 101 than just the four 1970's cases cited by the Examiner. See *Final Office Action of June 3, 2005*, p 2 (citing *In re Toma*, 575 F.2d 872 (C.C.P.A. 1978); *In re Johnston*, 502 F.2d 765 (C.C.P.A. 1974); *In re Waldbaum*, 457 F.2d 997 (C.C.P.A. 1972); *In re Musgrave*, 431 F.2d 882 (C.C.P.A. 1970)).

Applying the statutory language of 35 U.S.C. § 101 and the courts' interpretation thereof to the claims of the current application reinforces that claims 13 and 15-27 meet the "new and useful process" element of 35 U.S.C. § 101. Each of these claimed methods produces a result "which ha[s] specific meaning – a useful, concrete, tangible result – not a mathematical abstraction," *AT&T Corp.*, 172 F.3d at 1359, such as, for example, "**generating an alarm**" or "**producing alarm information**." Claim 13, for example, recites *inter alia*, "**producing a failure rate** based on **disconnect cause codes** of **VOIP call usage records**," and "**generating an alarm**." Claim 15, for example, recites *inter alia* "**produce failure rate information** based

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on disconnect cause codes of VoIP call usage records associated with VOIP call traffic," and "generate an alarm." Claim 16, for example, recites *inter alia* "receiving VoIP call usage records for VoIP call traffic passing through the VoIP network, wherein each of the VoIP call usage records identifies a disconnect cause code and one of a plurality of network elements," and "producing alarm information." Such example elements of claims 13 and 15-27 exhibit a solid foundation in the technological arts; such methods produce meaningful, concrete, useful, real-life results, not mere abstract ideas or mere mathematical equations.

Furthermore, the undersigned has reviewed the four 1970's cases cited by the Examiner, and finds them to be consistent with a recognition of claims 13 and 15-27 as proper statutory subject matter. These four cases set forth examples of claimed inventions that *do* fall within the "technological arts," but none of the cases sets forth precedent that would bar the present claims from the broad scope of 35 U.S.C. § 101. See *In re Toma*, 575 F.2d 872 (C.C.P.A. 1978); *In re Johnston*, 502 F.2d 765 (C.C.P.A. 1974); *In re Waldbaum*, 457 F.2d 997 (C.C.P.A. 1972); *In re Musgrave*, 431 F.2d 882 (C.C.P.A. 1970). In fact, the *In re Toma* case distinguishes and limits *In re Musgrave*. *In re Toma*, 575 F.2d at 878 ("The language which the examiner has quoted was written in answer to 'mental steps' rejections and was not intended to form a basis for a new s 101 rejection as the examiner apparently suggests"). Applicant respectfully submits that a court's statement of what *is* statutory subject matter does not necessarily serve as a statement of what *is not* statutory subject matter. As mentioned above, the Supreme Court has already set forth exclusions to statutory subject matter, and they are: "laws of nature, natural phenomena, and abstract ideas." *Diamond*, 450 U.S. at 185. The claims of the present application do not fall into any of these excluded categories. Applicant also respectfully requests the Examiner to review more recent cases interpreting 35 U.S.C. § 101, such as *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352 (Fed. Cir. 1999); *Arrhythmia Research Technology, Inc. v. Corazonix Corp.*, 958 F.2d 1053 (Fed. Cir. 1992); and *State St. Bank & Trust Co. v. Signature Fin. Group, Inc.*, 149 F.3d 1368 (Fed. Cir. 1998), for example.

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For at least the aforementioned reasons, Applicant respectfully requests the Examiner to withdraw the claim rejections under 35 U.S.C. § 101. Claims 13 and 15-27 are believed to be in condition for allowance, such being respectfully requested herein.

CLAIM REJECTIONS - 35 U.S.C. § 102

In the Final Office Action, the Examiner rejected claim 14 under 35 U.S.C. § 102(e) as being anticipated by Gross et al. (U.S. 6,553,515) (hereinafter "Gross"). Claim 14 was the only claim of the present application that was twice rejected based on the same reference. Applicant has cancelled claim 14 without prejudice, and therefore respectfully requests the Examiner to withdraw the rejection under 35 U.S.C. § 102(e).

CLAIM REJECTIONS - 35 U.S.C. § 103

In the Final Office Action, the Examiner rejected claims 13 and 15 under 35 U.S.C. § 103(a) as being unpatentable over Murphy et al. (U.S. 6,282,192) (hereinafter "Murphy") in view of Gross et al. (U.S. 6,553,515) (hereinafter "Gross"). Applicant respectfully asserts that claims 13 and 15 are patentable over the combination of Murphy and Gross.

Claim 13 provides, *inter alia*, "producing a failure rate based on disconnect cause codes of VoIP call usage records associated with VOIP call traffic handled by a particular VoIP network element for a given time interval; determining if the failure rate exceeds a defined threshold; and generating an alarm if it is determined that the failure rate exceeds the defined threshold." Claim 15 provides, *inter alia*, "computer program product . . . comprising instructions for causing a computer to: produce failure rate information based on disconnect cause codes of VoIP call usage records associated with VOIP call traffic handled by a particular VoIP network element for a given time interval; determine if the failure rate information exceeds a defined threshold; and generate an alarm if it is determined that the failure rate information exceeds the defined threshold."

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"In order to establish a *prima facie* case of obviousness," one criteria is that the "prior art reference (or references when combined) must teach or suggest all the claim limitations." *MPEP* § 2142. At least one claim limitation exists in claims 13 and 15 that is not taught, disclosed, or suggested by either Murphy or Gross. The Examiner points to the passage in Murphy col. 8, line 44 as showing "producing a failure rate based on disconnect cause codes of VOIP call usage records associated with VOIP call traffic handled by a particular VoIP network element for a given time interval." *Final Office Action of June 3, 2005*, p 3. However, Murphy neither teaches, discloses, nor suggests at least the following expressly recited claim elements, either singly or in combination: "producing a failure rate," "based on disconnect cause codes," "VOIP call usage records associated with VOIP call traffic handled by a particular VoIP network element," or "for a given time interval." Murphy, and in particular the language to which the Examiner refers in col. 8, references only a "congestion detector" which may periodically ping communication endpoints to look for network congestion, thereby creating a "probing history table." Looking for network congestion is not the same as "producing a failure rate" or "producing a failure rate based on disconnect cause codes." Furthermore, the "congestion detector" of Murphy references the "probing history table," which is apparently created through probing and is not based on usage records, let alone "VOIP call usage records." For at least these reasons, Murphy simply does not teach, disclose, or suggest at least these elements of claims 13 and 15.

The Examiner also points to the passage in Murphy col. 8, line 54 through col. 9, line 16 as showing "determining if the failure rate exceeds a defined threshold." *Final Office Action of June 3, 2005*, p 3. However, Murphy, and in particular the language to which the Examiner refers in col. 8, line 54 through col. 9, line 16, fails to teach, disclose, or suggest "the failure rate" (which, according to expressly-recited claim language, is "based on disconnect cause codes . . .") or "the failure rate exceeds a defined threshold." Instead, Murphy focuses on "quality of service" of a "VoIP link" (Murphy col. 8, line 5) rather than on "disconnect cause codes of VOIP call usage records associated with VOIP call traffic handled by a particular VOIP network element." Because Murphy does not teach, disclose, or suggest "disconnect cause codes" or "VOIP call usage records," Murphy also does not teach, disclose, or suggest "a failure rate based on

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disconnect cause codes,” and therefore also cannot teach, disclose, or suggest “determining if the failure rate exceeds a defined threshold” as claimed. Murphy also does not reference a “threshold” of any kind, and the “predetermined number” found in the passage cited by the Examiner instead refers to a number of calls rerouted over a DDR link, rather than a “defined threshold” for a failure rate based on disconnect cause codes. For at least these reasons, Murphy simply does not teach, disclose, or suggest at least these elements of claims 13 and 15.

Gross also fails to provide at least one claim element that Murphy lacks. Applicant agrees with the Examiner that Murphy fails to teach “generating an alarm if . . . the failure rate exceeds a defined threshold.” *Final Office Action of June 3, 2005*, p 3. However, Gross also fails to disclose, teach, or suggest “generating an alarm if it is determined that the failure rate exceeds the defined threshold.” For this claim element, the Examiner at page 3 of the Final Office Action points to Gross (col. 1, lines 45-65; col. 7, lines 50-51; col. 8, lines 1-20; and col. 16, lines 65-67) as supporting the statement that “Gross...discloses a system for managing diagnostic and performance information which includes setting up diagnostic control message that when a parameter threshold is reached, an alert will be generated via an alarm or paging device to a network professional/administrator.” However, Gross does not disclose how or why alarms may be generated. In particular, Gross fails to disclose, teach, or suggest *any* conditions for the creation of an alarm, and does not appear to relate the “thresholds” of col. 16, line 67 in any way to the “external warnings” of col. 8, line 18; therefore, Gross does not disclose, teach, or suggest “generating an alarm if it is determined that the failure rate exceeds the defined threshold.” Because claim 15 has limitations similar to claim 13, the same rationale applies.

Further, the claim language as previously amended evidences that the “failure rate” of claims 13 and 15 is “based on disconnect cause codes of VOIP call usage records.” Gross does not teach, disclose, or suggest “a failure rate based on disconnect cause codes of VOIP call usage records.” Instead, Gross teaches “silent and non-silent detection can occur *once an IP connection is established* between two or more TEs” (Gross col. 19, lines 3-5; emphasis added), “detection of diagnostic parameters *begins once an IP connection is established*” (Gross col. 19, lines 64-65;

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emphasis added) and deals with "attendant supervision of *IP connections*" (Gross col. 20, line 24; emphasis added). Because the Gross disclosure appears to be limited to detection of parameters of an *established* IP connection, such as detection in order to reroute an IP network connection over a PSTN (Gross col. 2, lines 4-10), Gross would have no need to, and does not, teach, disclose, or suggest "VOIP call usage records" or "disconnect cause codes." In addition, claims 13 and 15 recite, *inter alia*, "particular VoIP network element," whereas Gross gathers information not on a particular network element but instead on "a given *IP connection*" (Gross col. 11, lines 39-44, emphasis added). Because Gross does not teach, disclose, or suggest "VOIP call usage records" or "disconnect cause codes," Gross also does not teach, disclose, or suggest "a failure rate based on disconnect cause codes of VOIP call usage records," and, likewise, does not teach, disclose, or suggest "generating an alarm if it is determined that the failure rate exceeds the defined threshold" as claimed.

Murphy in view of Gross does not teach or suggest at least one limitation of claims 13 or 15. For at least the aforementioned reasons, claims 13 and 15 are patentable over Murphy in view of Gross. Therefore, claims 13 and 15 are believed to be in condition for allowance, such being respectfully requested herein.

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CONCLUSION

The Applicant respectfully submits that the rejections have been overcome by the amendment and remark, and that the remaining pending claims are now in condition for allowance. Accordingly, the Applicant respectfully requests that the rejections be withdrawn and that a Notice of Allowance be issued for claims 13 and 15-27.

INVITATION FOR A TELEPHONE INTERVIEW

The Examiner is requested to call the undersigned at (303) 607-3709 if there remains any issue with allowance of the case.

CHARGE OUR DEPOSIT ACCOUNT

No fee is believed to be necessary for entry of this paper. In the event that any such fee is necessary for the entry of this paper, please charge to our Deposit Account No. 06-0029 any fees under 37 C.F.R. 1.16 and 1.17 which may be requested to enter this paper.

Respectfully submitted,

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